

modern practice would suggest many modes of treatment by which lightness and stability could be combined; but certain enough, brick piers and arches would be as unnecessary as they would be undesirable: with an increasing traffic it would not be found that any of the space underneath was useless, or that such obstacles as brick piers would have been otherwise than inconvenient and dangerous: round cast-iron pillars, for the supports, would therefore be found to be the best adapted to the purpose in form and material; and iron beams would be less inconvenient than iron arches where the platform joined the inclines. To the right and left of the line of Farringdon and Victoria streets, spaces might probably be spared in the centre as cab stands; but in the extreme ends, where the platform of the viaduct joined the inclines, and the wedged-shaped space beneath terminated, public halting-places might be formed with advantage.

Centrally, in the length of the viaduct, or where it was intersected by the Farringdon and Victoria street line, an enlargement of a circular or other form in the plan, might be made as a station for omnibuses taking in passengers,—stairs being constructed leading up on both sides from the low level.

It will be perceived that the scheme here indicated could be carried out without touching a building, a foot-path, or even a curb-stone. As regards its effect upon the contiguous property, I think it is equally evident that, when once the viaduct was completed and working, that could not be deteriorated, but would more probably be enhanced in value; especially in the lower parts, nearest Farringdon-street. The inconvenience during execution, too, need be but very temporary; since the work would be of a kind which could be almost wholly prepared before the fixing of any part was proceeded with. This Holborn-hill nuisance, therefore, which has been a source of such grievous complaint for many years, and which, so long as it lasts, must keep on increasing, is by no means the formidable difficulty that its continued existence would seem to imply. When I went to the spot recently, on purpose to view it with reference to the subject of its improvement, there seemed to be but one rational mode of dealing with it—by a central viaduct; and when I subsequently made inquiries as to what had been already proposed, it was with some satisfaction that I found the same idea, though different in the treatment, had suggested itself to two previous projectors.

JAMES WYLLSON.

#### THE EXHIBITION OF SKETCHES AND DRAWINGS BY ENGLISH ARTISTS.

The promoters of this exhibition, encouraged by the success that attended their first efforts (though not in a pecuniary point of view), and by the ready manner in which their invitations were responded to by artists, have opened their second exhibition in Pall-mall East, and present to public inspection a very interesting collection of studies, extempore sketches, transcripts from nature, first thoughts for pictures, and careful bits of detail.

There is always a charm in sketches (a freshness in first impressions lends its aid in their execution), not to be found in the more matured and highly-wrought pictures, and they make one on more intimate terms with the artist. Some characteristic studies by Mr. John Lewis (five in number) attract immediate attention. The individuality and truthfulness of (134) "Roman Peasant Boy," and (137) "Roman Lady," are as admirable as the expression of (143) "The Greek Primate, Therapia," and (140) the exquisitely-painted head of "Lord Viscount Castlereagh." These, with (146) "A Lady of Rank," are fine examples of delicate and elaborate finish in water-colour portraiture.

(22) "The Opera Box," by W. P. Frith, A.R.A., is a gem of first water: the figure lovely and ladylike. (35) "Anticipation," A. L. Egg, A.R.A., is powerful in colour and painted as only few can paint. (25) "Capuchin

Convent at Amalfi," (31) "The Bay of Monaco," (130) "Martello Tower, Mentone—Evening," (136) "St. Remo, Gulf of Genoa, Santa Croce, in Gierusalemme," and (264) "Amalfi, from the Convent," by Mr. Cook, chiefly painted on the spot with photographic truth; are interesting as correct delineations. (36) "The Lily," J. J. Jenkins, is a pretty study. (40) "The New Novel," H. O'Neil, carefully painted, but wanting in refinement; and (87) "The Lily of the Valley," E. M. Ward, A.R.A., are personations in which their several styles are to be discriminated.

Mr. F. R. Pickersgill is advantageously displayed in his water-colour sketches. (69) I. "Angelica delivered from the Sea Monster," Ariosto—II. "Sabrina descending," Corneille—and III. "Frolic." The composition of "Sabrina" is exceedingly beautiful, and all denote great knowledge of the resources of colour. The sketch for his (84) "Rinaldo destroying the Myrtle Tree in the Enchanted Forest," is a covetable reminiscence of his fine picture.

Mr. Hook, A.R.A., exhibits his sketch for "A Dream of Venice" (240)—very suggestive of the Venetian masters; and his study of a Female Head (81) still more forcibly illustrates how effectively he has adapted their style. The first sketch for Mr. Cope's (R.A.) "Fresco of Griselda" (287) is a highly-finished drawing, and exemplifies the care and attention exercised on his subject.

The correctness and sound judgment apparent in Mr. Mulready's pen and ink "Sketch" (274) prove how unremittently he must have worked to acquire his certainty, and his chalk "Sketch" (285) shows how grace and science combined assist in making the simplest material interesting.

Amongst the studies for pictures are (164) "Sketch for a large picture," illustrative of English poetry, by F. Medox Brown, the centre compartment of which all that have visited the last Academy exhibition are acquainted with. Mr. W. Cave Thomas's (11) "Study for a large picture," from the Evangelist (Mark), chap. xiii. as well as his (142) "Sketch in oil for the compartment of Justice," House of Lords, deserve careful attention. (93) "Samson in Captivity," E. Armitage, is clever though unpleasant.

(125) "The Sentinel," R. Hannab, a well-painted head; and (126) "Signor Don Sancho Panza, Governor of Barataria," a drawing made with seemingly great facility, in pen and ink, by J. Gilbert, are remarkable. (233) "Grace" and (244) "The Trial of the Sword" are better specimens of Cattermole than (260) "Amy Robsart."

(222) "Sketch for the Picture of the Bourgeois Gentilhomme," W. P. Frith, A.R.A., has the qualities and general appearance of a *bona fide* picture, whilst (266) "La Fleur's Departure from Montreuil," vividly recalls one of Mr. E. M. Ward's most charming performances.

(252) "Lateral View of the Portico of the Great Temple of Edfo," (255) "Entrance to the Great Temple of Aboosimbool, in Nubia," showing the first period of Egyptian architecture of the time of the Pharaohs; and (263) "The Portico of the Temple of Edfo, in Upper Egypt," showing the second period of Egyptian architecture of the time of the Ptolemies, are three of those Eastern studies with which the name of David Roberts, R.A., is so closely associated: in pleasing contrast, his (259) "Church of St. Bavon at Haarlem," showing the great organ; and (262) "Interior of Kelso Abbey, Roxburghshire," are depicted with that adaptive and perceptive skill for which he is justly famous.

Mr. Stanfield, R.A., has (96) his "Study for the Picture of Salvator Rosa; (131) "An Interior of Chepstow Castle; and (267) "The Great Tor," to represent him. Mr. Hart's (276) "Interior of the Sacristy of St. Mark's," and (279) "Great Council Chamber in the Ducal Palace at Venice," are, with (241) "The Palazzo Cornaro Spinelli, Venice," of Mr. Lake Price, sparkling and clearly-defined studies of interior. Mr. Holland's Turner-like (230) "Venice," and richly-coloured "Realt," have afforded him an opportunity of revelling in the

prismatic rays. (280) "The Lake of Albano and Castle Gandolfo," and (281) "Cottage of Hampstead Heath," by Mr. Linton, remind one of ancient masters.

Conspicuous amongst out-door sketches are (145) "A Study of Boats," very fine, by T. Creswick, R.A.; Mr. Duncan's (75) "Cottage at Dawney, near Windsor," and (129) "Study in Knowle-park," (95) Red-hill Common," C. Davidson; (127) "In Housdon, Renfrewshire," W. L. Leitch; (98) "Sketch from Nature, at Margate," George Richmond, (132) "Two Sketches made at Hastings," Frank Dillon; (43) "Donstauborough Castle, Coast of Northumberland," (53) "A Salmon Trap on the Lledder, North Wales," and "A Water Mill, near Caernarvon, all by J. Wilson, jun.; (159) "Earlwood Common, Reigate," C. Davidson; and Mr. Jutson's, (169) "Mile-end Ferry, near Henley-on-Thames." A careful drawing in chalk, by Mr. T. Webster, R.A., of (184) "An Old Dame; two masterly charcoal sketches, (62) "Introduction," and (67) "The Assault," by Mr. Tenniel; (192) "Grapes," George Lane; (210) "Pineapple, &c.," V. Bartholomew; (215) "Poacher on the look-out," and (229) "Duck Shooting," by Mr. Andell, are amongst those that attract attention. Nor must we forget the elaborated and Dutch-looking interiors of Mr. Hardy (273 and 284) transcribed with much patience and aptitude or the graphic memoranda of Mr. C. Landseer, R.A., (72) "Entrance at Knowle," (99) "Scene in an upper Apartment," likewise at Knowle, and (259) "Staircase at Mayfield," or the masterly studies in oil, (70) "An Italian Pilgrim," and (100) "Pifferari," by Mr. Carl Haag, or a charming drawing by Topham, (128) "Highland Bridge," or the careful studies of flowers (76 and 90) by H. O'Neil.

James Godwin has three drawings, (26) "Music," (189) "An Episode from the History of the Plague" (a sanitary fire, with crowding wretches), and (198) "A Provision Merchant during the Plague of 1665," which will help to build him a reputation.

The several names of Linnell, Copley Fielding, G. Frupp, Callow, Clint, Bennett, Gattineau, G. E. Hering, Leitch, Duncan, Allen Dodgson, Davidson, T. M. Richardson, Branwhite, and some others, are appended to works of considerable excellence.

#### PRACTICAL METHOD OF CONSTRUCTING THE REGULAR PENTAGON, OR FIVE-SIDED POLYGON

SIMPLE and practical methods of describing polygons of any proposed number of sides are of very great use to individuals who are in any way connected with the building arts, as erections of various polygonal forms are frequently made the objects of contemplation and design, and are sometimes brought forward as prominent and conspicuous embellishments to a group of buildings.

Now, ready and expeditious methods of delineating polygons, even although these methods should be only approximative, must be of considerable importance to practical men, and it is chiefly on account of the great utility of the methods here given, that we have been induced to put them into such a form as the readers of THE BUILDER may readily comprehend and put in practice, when cases of the kind offer themselves for consideration.

The simplest of polygonal figures is the equilateral triangle or *trigon*; the next the equilateral rectangle or *square*, of which the methods of construction are well known, and for this reason we need not take any further notice of them here; but some of the polygons of higher orders are not so easily constructed, and short approximating methods of easy remembrance and application are here given for the use of the practical architect and mechanic.

**PROBLEM I.**—To construct a regular pentagon, or a polygon having five equal sides.

The problem, as here enunciated, is proposed in a general way, without any limiting condition whatever as regards the length of the side, or the description of it in or about a given circle; but when the figure has once